Title: Murine Calcivirus
Inventor(s): Virgin, Herbert W.
Appln. No. Not Yet Assigned
Docket # 56029-45752
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| Α         | . 1                   | /11       |
|-----------|-----------------------|-----------|
|           | mous strain d         | ead/total |
| Passage 0 | RAG/STAT-/-           | 5/6       |
| Passage 1 | RAG/STAT-/-           | 15/15     |
| Passage 2 | IFNαβγR-/-            | 15/15     |
|           | IFNαβγR-/- (filtered) | 9/13      |
|           | 129                   | 0/4       |

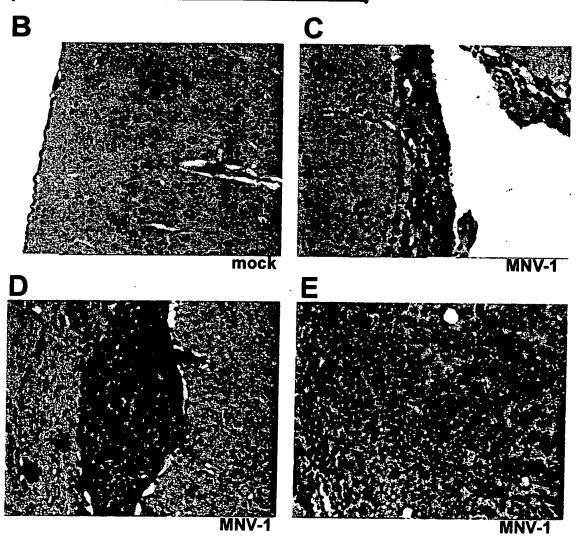


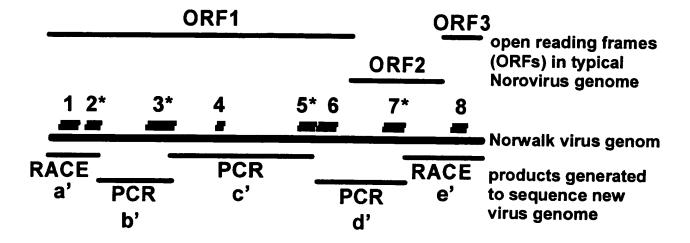
Figure 1

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### Discovery and sequencing of n w virus genome

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# A Norwalk virus genome (7654 bp) as a framework



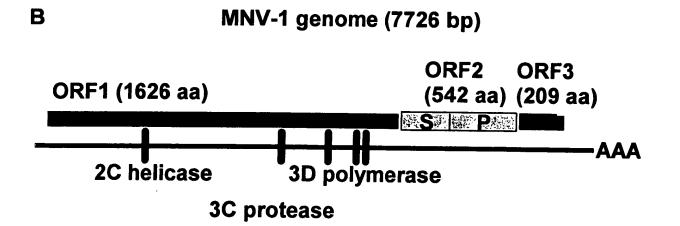
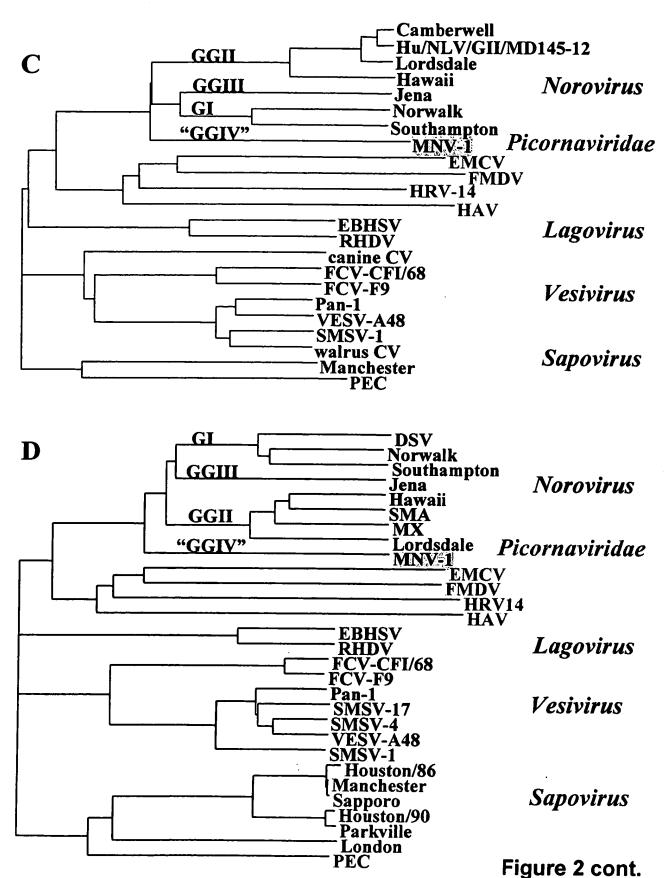


Figure 2

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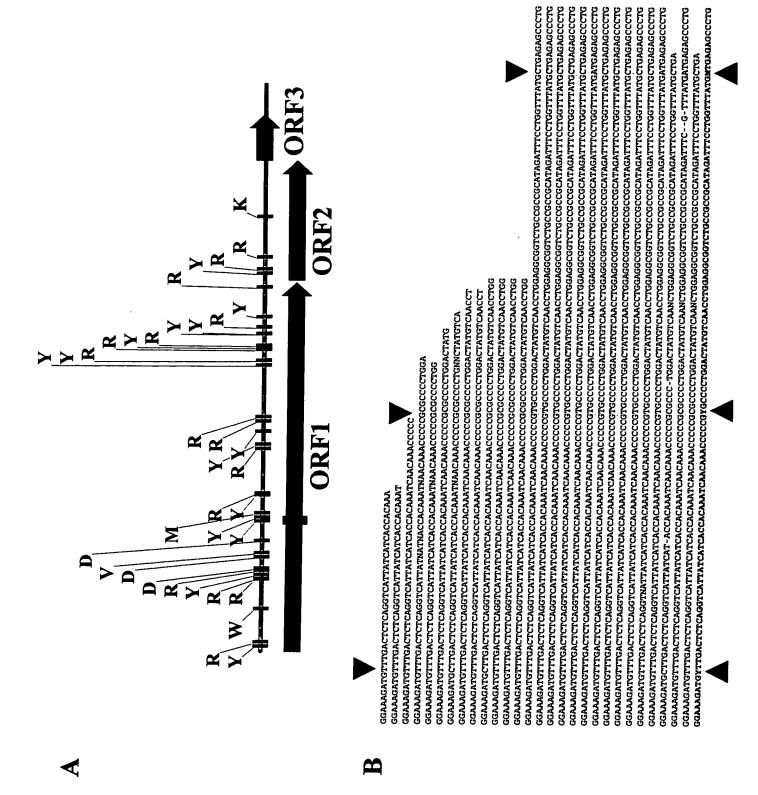


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A

CsCl density (g/cm³)

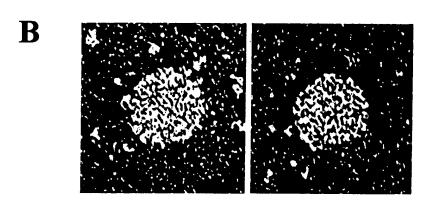
9 9 9 8 5 8 5 8 6 6 6 7 7 7 7

-500bp

-300bp

\*

average density = 1.36+/-0.4 g/cm³



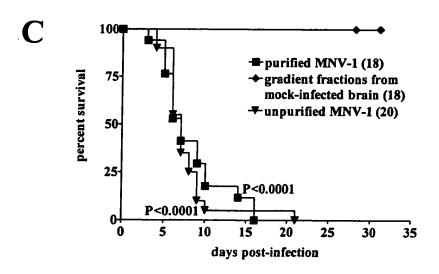


Figure 4

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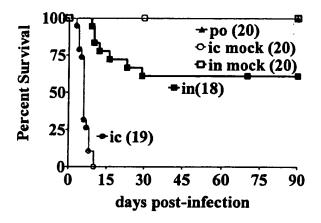
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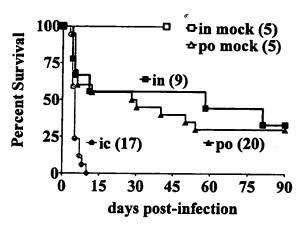
A

| Mouse strains demonstrating no mortality after challenge with MNV-1 |  |             |             |  |
|---|--|-------------|-------------|--|
| Mouse strain  | Inoculation route, and number of mice inoculated |             |             |  |
|   | ic (30dpi)                                       | in (90 dpi) | po (90 dpi) |  |
| 129   | 20   | 10          | 20          |  |
| B6  | 20   | not done    | not done    |  |
| RAG-/-  | 20   | not done    | not done    |  |
| IFNαβR-/-   | 19   | 10          | 10          |  |
| IFNγR-/-  | 19   | 10          | not done    |  |
| iNOS-/-   | 20   | not done    | 20          |  |
| PKR-/-  | 19   | not done    | 20          |  |

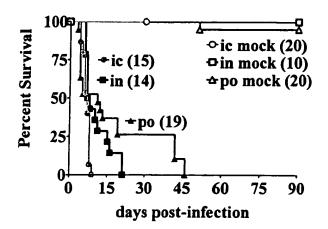
# B: IFN $\alpha$ βγR-/-



# **C: STAT1-/-**



#### D: RAG/STAT-/-



# E: STAT/PKR-/-

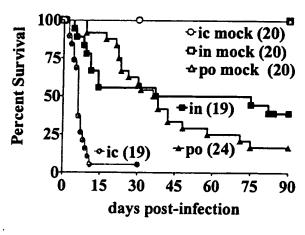
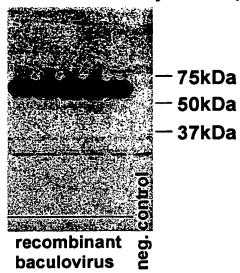


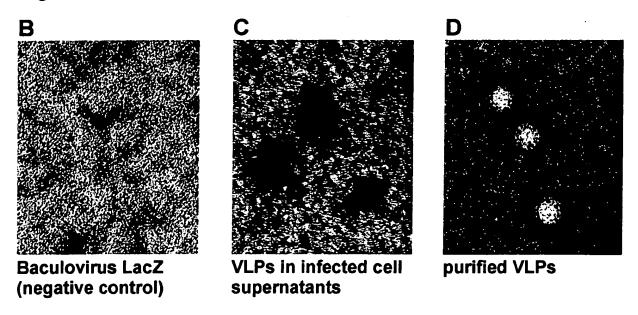
Figure 5

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A Western blot analysis of capsid protein expression



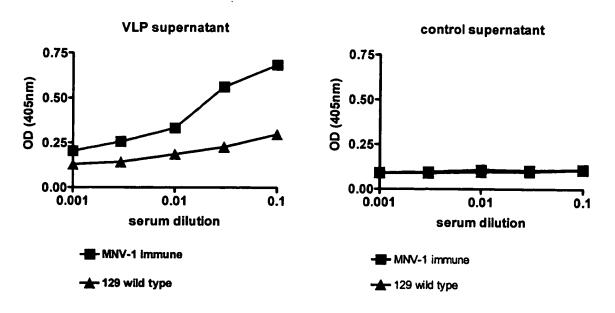
#### negative stain EM of MNV-1 VLPs



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B

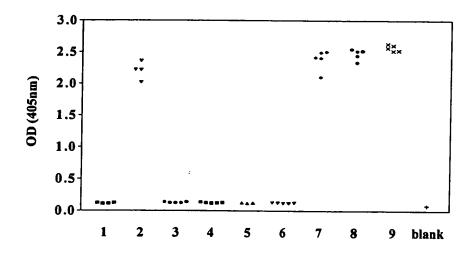


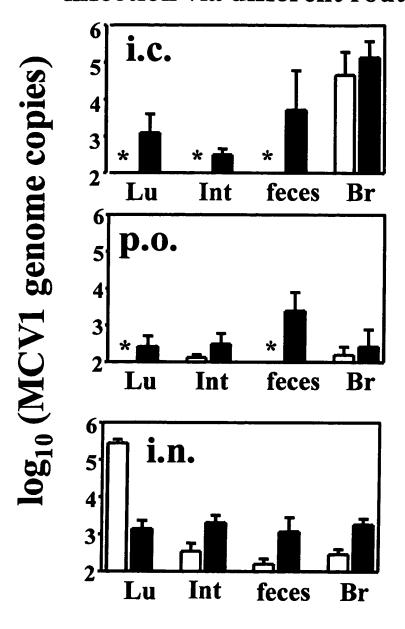
Figure 7

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# Tissue MCV1 RNA levels after infection via different routes



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# Spleen sections of STAT1-/- 3dpi after p.o. inoculation with MNV-1

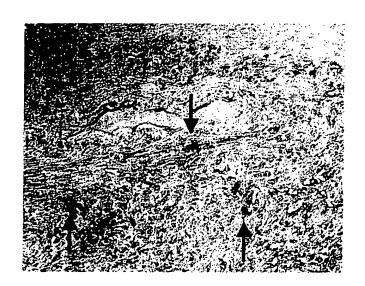


Figure 9

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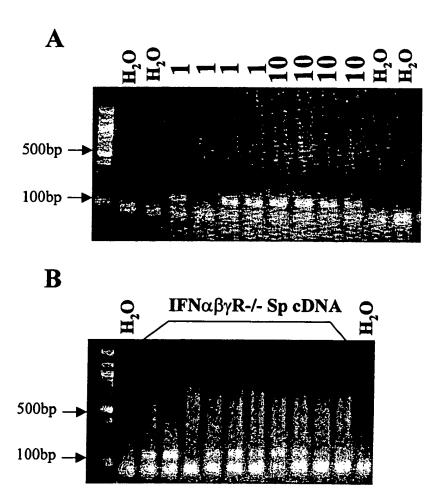


Figure 10